

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1, 3-16, 19 and 20 are pending in the application, with claims 1, 4, 15, and 16 being the independent claims. Claims 2, 17, and 18 have been canceled. The amendments to the claims are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicant respectfully requests that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Rejections under 35 U.S.C. § 103

Claims 1-4, 6-9, 12, 13, and 15-20 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,761,557 to Gellert et al. in view of U.S. Patent No. 6,043,466 to Jenko et al. Claims 2, 17, and 18 have been canceled, thereby rendering their rejection moot.

The Examiner stated in the Office Action that

Gellert ('557) teaches a nozzle body having a melt channel with a first heater (106) securely attached to the nozzle body. Gellert et al. ('557) also teaches a second heater (102) for heating the melt channel, however Gellert et al. ('557) does not teach the second heater being slideably attached and partially overlapping the first heater. Jenko et al. ('446) teaches a slide-on heater clamp (100) designed for clamping to an object for heating purposes, especially a nozzle or a hot runner channel.

Depending on how far up the body of a nozzle the clamp heater is placed

would determine whether or not the first heater of a hot runner channel and the second heater would overlap.

Office Action, p.2. The Examiner further stated that

it would have been obvious to one skilled in the art to have modified the duel-heater [*sic*, dual-heater] hot runner melt nozzle of Gellert ('557) with the slide-on, heater clamp of Jenko et al ('455) [*sic*, ('466)] in order to provide a nozzle that can be operated in a multitude of electrical methods, as well as being totally capable of being disassembled for cleaning and or maintained.

Office Action, p. 3.

From the Examiner's statements, it appears that the Examiner is relying on the heaters (106, 102) of Gellert et al. as the first and second heaters recited in each of the independent claims. Using the clamp heater of Jenko et al., Applicant interpreted the Office Action as necessarily replacing one of the first and second heaters of Gellert et al. to make one of the heaters slideable. However, such a replacement would not address that the first and second heaters, as claimed, at least partially overlap because the first and second heaters (106, 102) of Gellert et al. do not overlap. During the interview, discussed below, the Examiner clarified that his position is that the clamp heater of Jenko et al. is ***added to*** the first and second heaters (106, 102) of Gellert et al. Applicant respectfully traverses the rejection.

The Examiner has not pointed to any motivation, in the references themselves, to add the clamp heater of Jenko et al. to the heaters (106, 102) of Fig. 11 of Gellert et al. The Examiner stated during the interview that the statement in the Jenko et al. patent that the clamp heater can be used on a hot runner channel implies that the hot runner channel

is already heated and that the Jenko et al. clamp heater is added to it. There is no support for such a position. In fact, Jenko et al. teaches away from such a proposition. Jenko et al. specifically teaches that its clamp heater is a replacement for, not an addition to, embedded or integrated type heaters. In particular, Jenko et al. states,

Integrated electrical heaters are very expensive, very difficult to manufacture, and impossible to replace, unless one sacrifices the entire nozzle. In many instances, it is preferable to use removable electrical heaters that are less expensive, can be easier manufactured, assembled, tested, and serviced. One major problem that has not been solved satisfactory so far is related to the clamping of the heater to the element to be heated so that an intimate thermal contact is established with minimal loss.

Jenko et al., col. 1, lines 25-33. Thus, it is clear that Jenko et al. is directed to improving the clamping technique in clamp-type heaters, and that such clamp-type heaters are to be used instead of, not in addition to, the "very expensive, very difficult to manufacture, and impossible to replace" integrated electrical heaters. Accordingly, Jenko et al. does not support the Examiner's proposition that it provides a teaching to add such a clamp heater to an already heated portion of a nozzle.

Figure 5 of Gellert et al. discloses two wire elements (80, 90) surrounding a nozzle body (68). However, the first wire element (80) is not in contact with an external surface of the nozzle body as recited in independent claims 4 and 16, nor is it at least partially embedded in an external surface of the nozzle body as recited in independent claims 1 and 15. Thus, even if the second wire element (90) was replaced with a clamp heater, such an arrangement would not disclose all of the features recited in the claims.

Further, one of ordinary skill in the art would not be motivated to replace the first wire element (80) of Gellert et al. with a partially embedded or surface mounted heater because Gellert et al. teaches away from embedded or surface mounted heaters. See col. 1, lines 32-55 and col. 2, lines 11-36.

For the reasons set forth above, independent claims 1, 4, 15, and 16 would not have been obvious in view of the Gellert et al. and Jenko et al. patents. Claims 3, 6-9, 12, 13, 19 and 20 depend from and add features to one of the listed independent claims and are therefore allowable over the Gellert et al. and Jenko et al. patents for at least the same reasons as the independent claim from which they depend. Applicants therefore respectfully request that the rejection be withdrawn.

Interview

Applicant and Applicant's representative thank Examiner Hogan and SPE Scherbel for the courtesy extended during the interview conducted on September 22, 2005. During the interview, the Examiner asserted that the Jenko et al. patent provides motivation to add a clamp heater to an already heated portion of a nozzle. As noted above, Applicant's representative disagreed that Jenko et al. provides such motivation, in particular, that there is no motivation in Jenko et al. to add a clamp heater to a portion of a nozzle that is already heated.

Conclusion

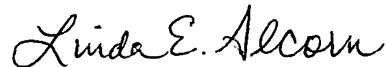
All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the

outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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